

Materials List Buying Guide

Sources for LEDs, Resistors, MOSFET, TMP36 Temperature Sensor, and Wires

Most of the circuit components are available through SparkFun at <https://www.sparkfun.com/categories>.

LEDs: <https://www.sparkfun.com/products/12062>

An n-channel MOSFET 60V 30A: <https://www.sparkfun.com/products/10213>

A resistor kit with 220 Ω , 330 Ω and 1 M Ω resistors: <https://www.sparkfun.com/products/10969>

TMP36 temperature sensor: <https://www.sparkfun.com/products/10988>

Jumper wires for the Arduino board, M/M, 6-inch or 7-inch: <https://www.sparkfun.com/products/10897> and <https://www.sparkfun.com/products/11026>

Most of these components are also available through other websites and can be found easily through a Google search. Any standard wire also works for this project, provided it fits into the breadboard holes.

Source for Breadboard and Arduino

Breadboards: <https://www.sparkfun.com/products/12615>

Arduino boards at Sparkfun; choose from the original Arduino Uno (R3) board or the equivalent SparkFun Redboard (programmed with Arduino); both are compatible with the Arduino IDE and work essentially the same:

<https://www.sparkfun.com/products/11021>

[\[usa.arduino.cc/products/a000066?utm_source=redirects&utm_medium=store.arduino.cc&utm_campaign=303_Redirects\]\(http://store-usa.arduino.cc/products/a000066?utm_source=redirects&utm_medium=store.arduino.cc&utm_campaign=303_Redirects\)](http://store-</p></div><div data-bbox=)

<https://www.sparkfun.com/products/12757>

Sources for Fan and AC Adapter

12V computer cooling fans are available at many Internet sources for a range of prices. One convenient and reliable vendor is Newegg: <http://www.newegg.com/Product/Product.aspx?Item=9SIA67038S8399>.

AC adapters can be found everywhere, too. The most important thing is to make sure the AC adapter you use has the correct specs: a **12V** AC-to-DC adapter with a current at or above the listed current draw of your fan. Although less-expensive alternatives may be available elsewhere, Home Depot sells a 12V 100mA plug-in power adapter: http://www.homedepot.com/p/SkyLink-12-Volt-DC-Plug-in-Power-Adapter-DC-12VGB/205073305?cm_mmc=Shopping%7cTHD%7cG%7c0%7cG-VF-PLA-D27E-Electrical%7c&gclid=CIKuw6-Vzs4CFcECaQod_LIG1g&gclsrc=aw.ds.